

IN THE CLAIMS:

Kindly amend the claims as follows:

1 1. (Currently Amended) A method of detecting a malignant
2 tumor glioma in a human subject, comprising:

3 (a) collecting a sample of a bodily substance containing human
4 nucleic acid or protein, said nucleic acid or protein having
5 originated from cells of the human subject;

6 (b) detecting quantitatively or semi-quantitatively in the sample a
7 level of expression for laminin $\alpha 4$ subunit protein or *laminin $\alpha 4$ -*
8 specific mRNA, wherein the *laminin $\alpha 4$ -specific mRNA* can be
9 amplified using SEQ ID NO:1 and SEQ ID NO:2 as a primer
10 pair; and

11 (c) comparing the expression level in (b) to a level of expression
12 in a normal control, wherein overexpression of laminin $\alpha 4$
13 subunit protein or laminin $\alpha 4$ -specific mRNA, with respect to
14 the control, indicates the presence of a malignant tumor in the
15 human subject.

2. (Canceled)

1 3. (Previously Presented) The method of Claim 1, wherein the
2 bodily substance is a tissue sample.

1 4. (Original) The method of Claim 3, wherein the tissue
2 sample is collected from the brain of the subject.

1 5. (Original) The method of Claim 3, wherein the tissue
2 sample is a tumor tissue.

6. (Canceled)

1 7. (Original) The method of Claim 1, wherein the bodily
2 substance is a cellular material.

8. (Canceled)

1 9. (Currently Amended) The method of Claim 7, wherein the
2 cellular material is a ~~carcinoma, sarcoma, lymphoma, mesothelioma, melanoma,~~
3 glioma, ~~nephroblastoma,~~ glioblastoma, oligodendroglioma, astrocytoma,
4 ependymoma, ~~primitive neuroectodermal tumor,~~ atypical meningioma, or malignant
5 meningioma, ~~or neuroblastoma.~~

10. (Canceled)

11-12 (Cancelled)

1 13. (Previously Presented) The method of Claim 2, wherein the
2 expression level of *laminin α 4*-specific mRNA is detected by measuring RNA.

1 14. (Previously Presented) The method of Claim 2, wherein the
2 expression level of *laminin* $\alpha 4$ -specific mRNA is detected by measuring cDNA.

1 15. (Previously Presented) The method of Claim 2, wherein a
2 gene expression microarray is used to detect the level of expression of *laminin* $\alpha 4$ -
3 specific mRNA.

1 16. (Currently Amended) The method of Claim 1, further
2 comprising detecting the overexpression of laminin $\beta 1$ subunit protein or *laminin*
3 $\beta 1$ -specific mRNA relative to the normal control, whereby two parts of glioma-
4 associated laminin-8 are detected.

17. (Canceled)

1 18. (Currently Amended) A method of diagnosing the
2 presence of a glioma in a human subject, comprising:

- 3 (a) obtaining a sample from the brain of the human subject;
4 (b) detecting quantitatively or semi-quantitatively in the sample a
5 level of expression for laminin $\alpha 4$ subunit protein or *laminin* $\alpha 4$ -
6 specific mRNA, wherein the *laminin* $\alpha 4$ -specific mRNA can be
7 amplified using SEQ ID NO:1 and SEQ ID NO:2 as a primer
8 pair; and
9 (c) comparing the expression level in (b) to a level of expression
10 in a normal control, wherein overexpression of laminin $\alpha 4$
11 subunit protein or *laminin* $\alpha 4$ -specific mRNA, with respect to
12 the control, indicates the presence of glioma in the subject.

19-20 (Cancelled).

- 1 21. (Previously Presented) The method of Claim 18, wherein
- 2 the expression level of *laminin* α 4-specific mRNA is detected by measuring RNA.

1 22. (Previously Presented) The method of Claim 18, wherein
2 the expression level of *laminin* $\alpha 4$ -specific mRNA is detected by measuring cDNA.

1 23. (Previously Presented) The method of Claim 18 wherein a
2 gene expression microarray is used to detect the level of expression of *laminin* $\alpha 4$ -
3 specific mRNA.

1 24. (Currently Amended) The method of Claim 18, further
2 comprising detecting the overexpression of laminin $\beta 1$ subunit protein or *laminin*
3 $\beta 1$ -specific mRNA relative to the normal control, whereby two parts of glioma-
4 associated laminin-8 are detected.

25. (Canceled)

1 26. (Currently Amended) The method of Claim 18, wherein
2 the sample is a tumor glial brain tissue.

27. (Canceled)

1 28. (Currently Amended) A method of predicting the
2 recurrence of a malignant tumor in a human subject from whom a tumor has been
3 resected, comprising:

4 (a) obtaining a tissue sample from the human subject, said tissue
5 sample being from a region adjacent to the site of the tumor;

6 (b) detecting quantitatively or semi-quantitatively a level of expression
7 for laminin α 4 subunit protein or *laminin α 4-specific mRNA* in
8 the sample, wherein the *laminin α 4-specific mRNA* can be
9 amplified using SEQ ID NO:1 and SEQ ID NO:2 as a primer
10 pair; and

11 (c) comparing the expression level in (b) to a level of expression in a
12 normal tissue control, wherein overexpression of laminin α 4
13 subunit protein or *laminin α 4-specific mRNA*, with respect to
14 the control, is predictive of a recurrence of a malignant tumor
15 in the subject.

1 29. (Original Claim) The method of Claim 28, wherein the
2 tissue sample is histopathologically normal in appearance.

30 -31 (Cancelled).

1 32. (Previously Presented) The method of Claim 28, wherein
2 the expression level of *laminin α 4-specific mRNA* is detected by measuring RNA.

1 33. (Previously Presented) The method of Claim 28, wherein
2 the expression level of *laminin* $\alpha 4$ -specific mRNA is detected by measuring cDNA.

1 34. (Previously Presented) The method of Claim 28, wherein a
2 gene expression microarray is used to detect the level of expression of *laminin* $\alpha 4$ -
3 specific mRNA.

35. (Canceled)

1 36. (Currently Amended) The method of Claim 28, further
2 comprising detecting the overexpression of laminin $\beta 1$ subunit protein or *laminin*
3 $\beta 1$ -specific mRNA relative to the normal tissue control, whereby two parts of
4 glioma-associated laminin-8 are detected.

37-43 (Cancelled).

44.-59 (Canceled)

1 60. (Currently Amended) A method of ranking a malignant
2 brain tumors ~~tumor~~ in a human subjects ~~subject~~, wherein said ranking orders the
3 tumors in terms of aggressiveness, comprising:

- 4 (a) obtaining a tissue sample from the human subject, said
5 sample comprising a cell expressing a plurality of mRNA
6 species that are detectably distinct from one another;
7 (b) detecting quantitatively or semi-quantitatively an expression
8 level of laminin α 4 subunit protein or *laminin α 4-specific*
9 mRNA, wherein the *laminin α 4-specific* mRNA can be
10 amplified using SEQ ID NO:1 and SEQ ID NO:2 as a primer
11 pair;
12 (c) constructing an expression profile of the sample comprising a
13 ~~combination of~~ the detected expression levels of laminin α 4
14 subunit protein or *laminin α 4-specific* mRNA ; and
15 (d) comparing the expression profile in (c) to an expression profile
16 for a normal tissue control, wherein a level of overexpression
17 of laminin α 4 subunit protein or *laminin α 4-specific* mRNA, with
18 respect to the control, is indicative of the ~~presence of and~~
19 degree of invasiveness of the tumor in the subject.
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61. - 74 (Cancelled).

1 75. (Currently Amended) The new method of Claim 1, further
2 comprising detecting the overexpression of a gene encoding laminin β 1 subunit
3 relative to the normal control, whereby two parts of glioma-associated laminin-8 are
4 detected.

1 76. (Previously Presented) The method of Claim 18, further
2 comprising detecting the overexpression of a gene encoding laminin β 1 subunit
3 relative to the normal control.

1 77. (Previously Presented) The method of Claim 28, further
2 comprising detecting the overexpression of a gene encoding laminin β 1 subunit
3 relative to the normal control.

1 78. (Previously Presented) The method of Claim 44, further
2 comprising detecting the overexpression of a gene encoding laminin β 1 subunit
3 relative to the normal control.

1 79. (New) The method of Claim 2, wherein the level of expression
2 of laminin α 4 subunit protein relative to the normal control tissue is detected.

1 80. (New) The method of Claim 18, wherein the level of
2 expression of laminin α 4 subunit protein relative to the normal control tissue is
3 detected.